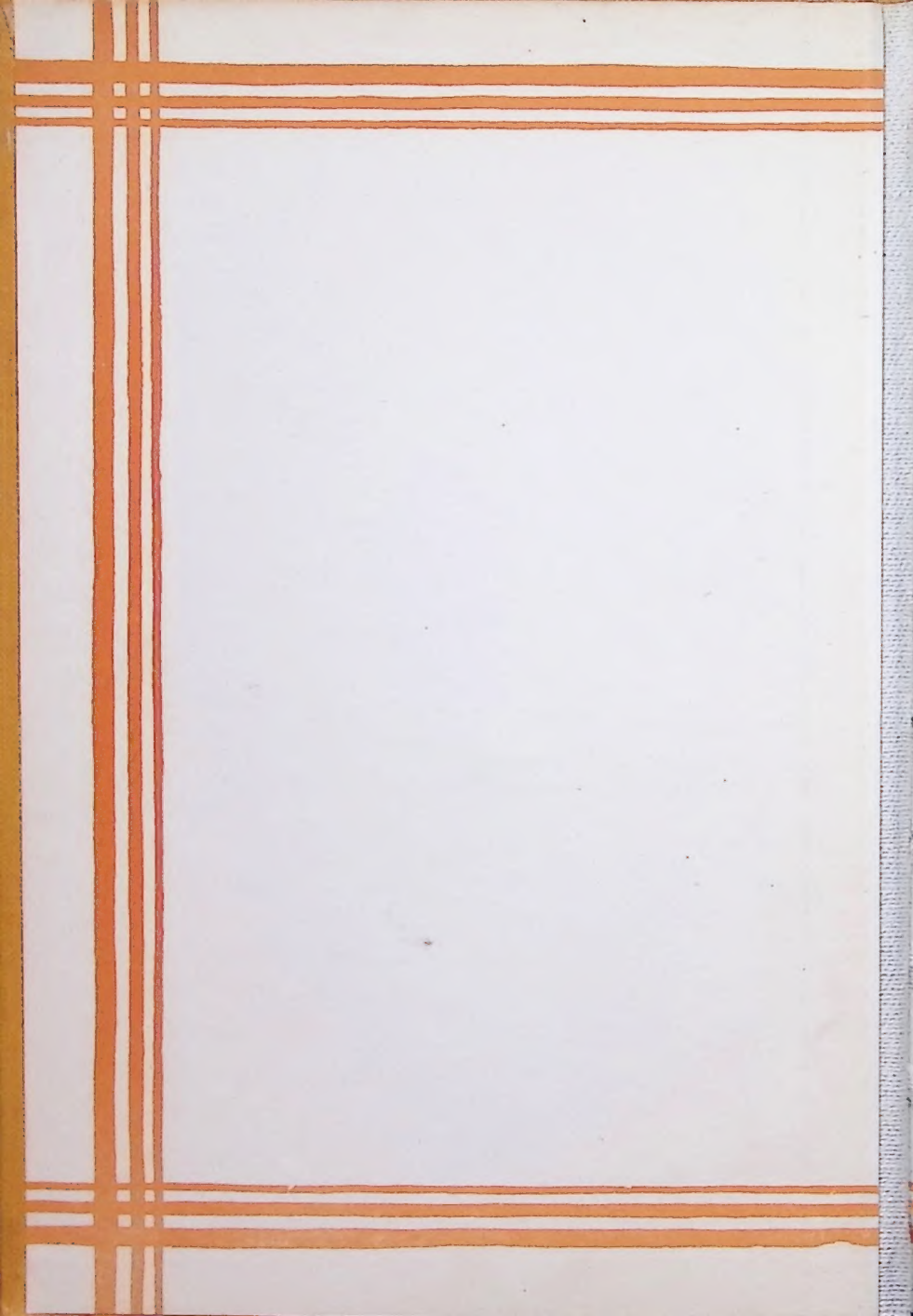


MOTHS AND BUTTERFLIES

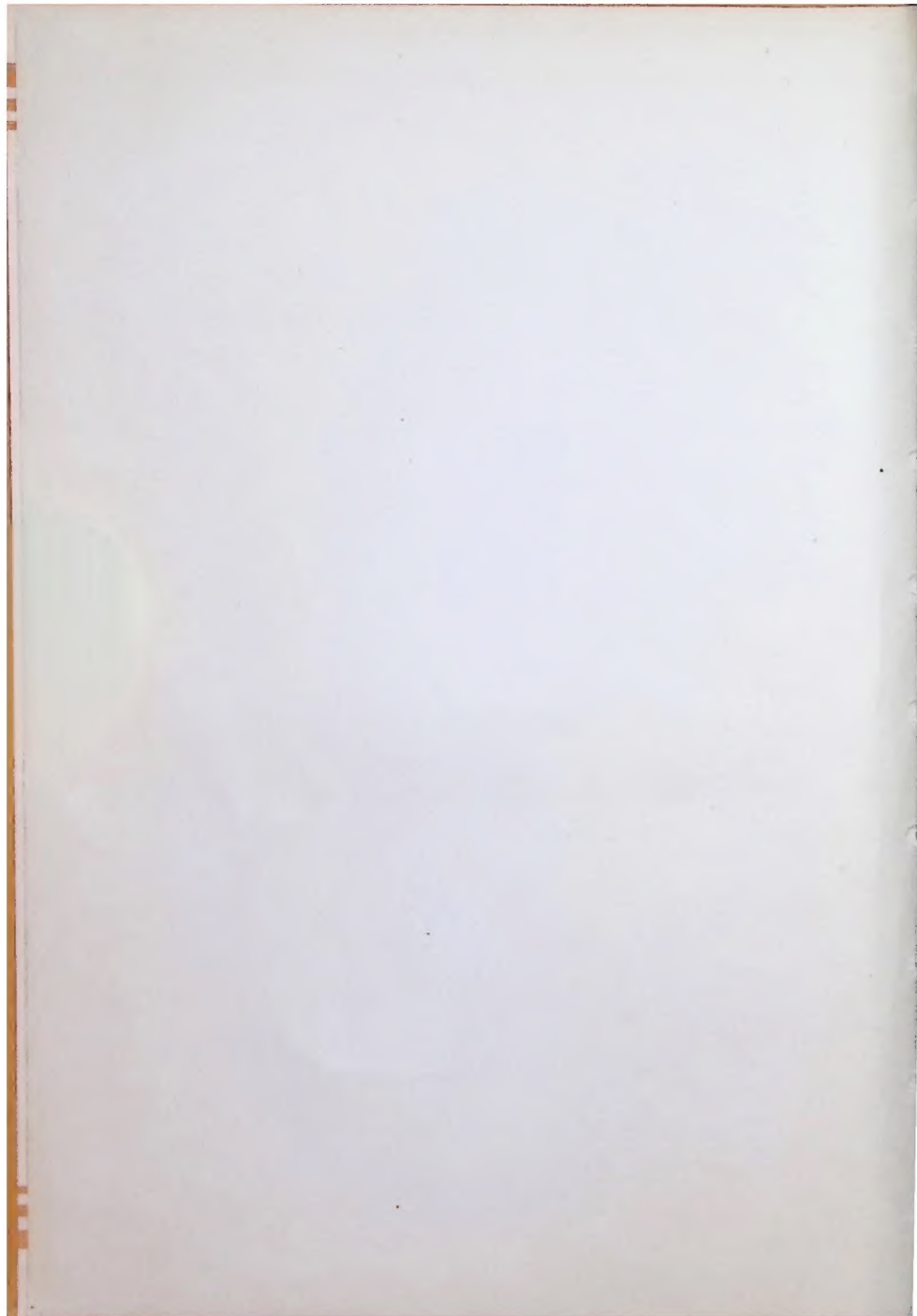
LINA M. JOHNS

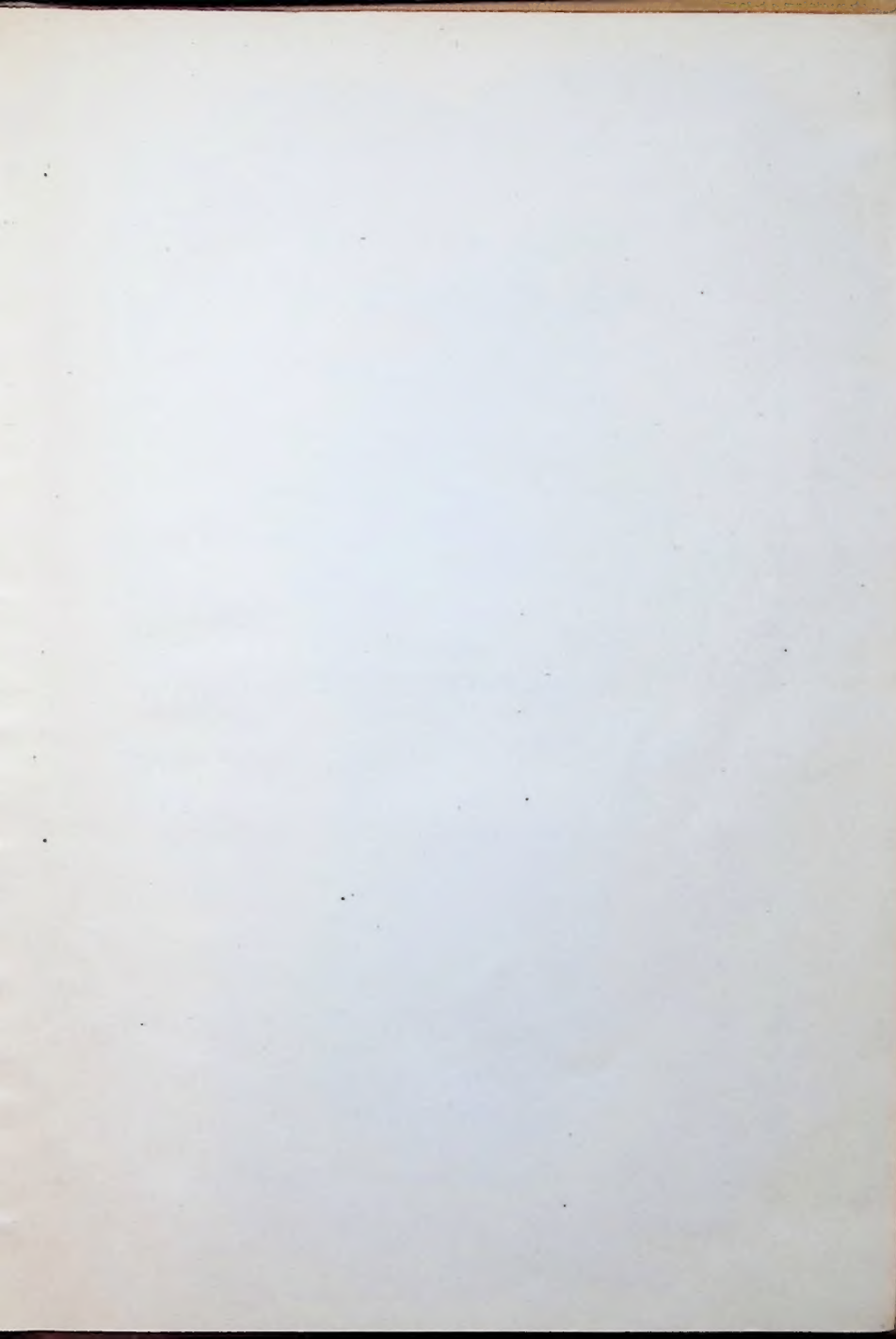
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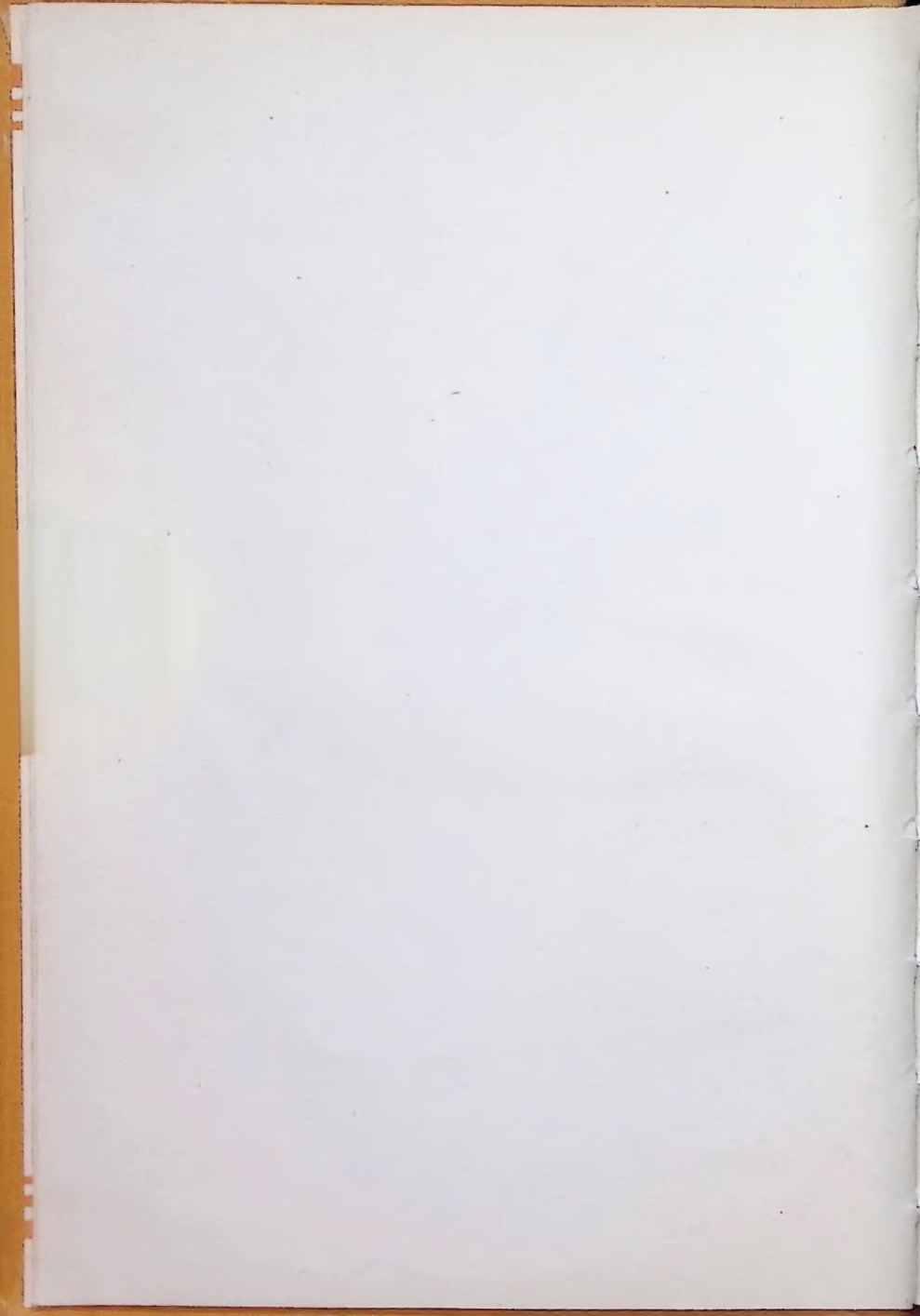




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MOTHS AND BUTTERFLIES

By

LINA M. JOHNS

TEACHER, GENERAL SCIENCE, DODGEVILLE, WISCONSIN

and

MAY AVERILL

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Illustrated by

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FOREWORD

In presenting factual material to young children, teachers often find it difficult to obtain reading matter that is scientifically accurate and, at the same time, available for use by the pupils themselves. *Moths and Butterflies* fills this need in one branch of elementary science. The authors, Lina M. Johns and May Averill, tell the life history of sixteen common species of moths and butterflies. Several are of economic importance; all are of perennial interest to the nature student, whether young or old.

Particular care has been taken to make the vocabulary and format of the book suitable for children of the primary grades. About ninety per cent of the words of the text are contained in *A Reading Vocabulary for the Primary Grades*, prepared by Arthur I. Gates, who based his study largely upon E. L. Thorndike's *Teacher's Word Book*. Many of the remaining ten per cent are "subject words"—names of species, food plants, and so on—essential to the treatment of the theme. The size of type, the even spacing of words, the length of line (limited to three and one-half inches), all make for ease in reading. Each sentence begins at the left-hand margin, and no words or phrases have been divided at the ends of lines. Such details as these may seem unimportant, but those who have carefully

studied children's reading know that they may make or mar the value of a book, especially for the primary grades.

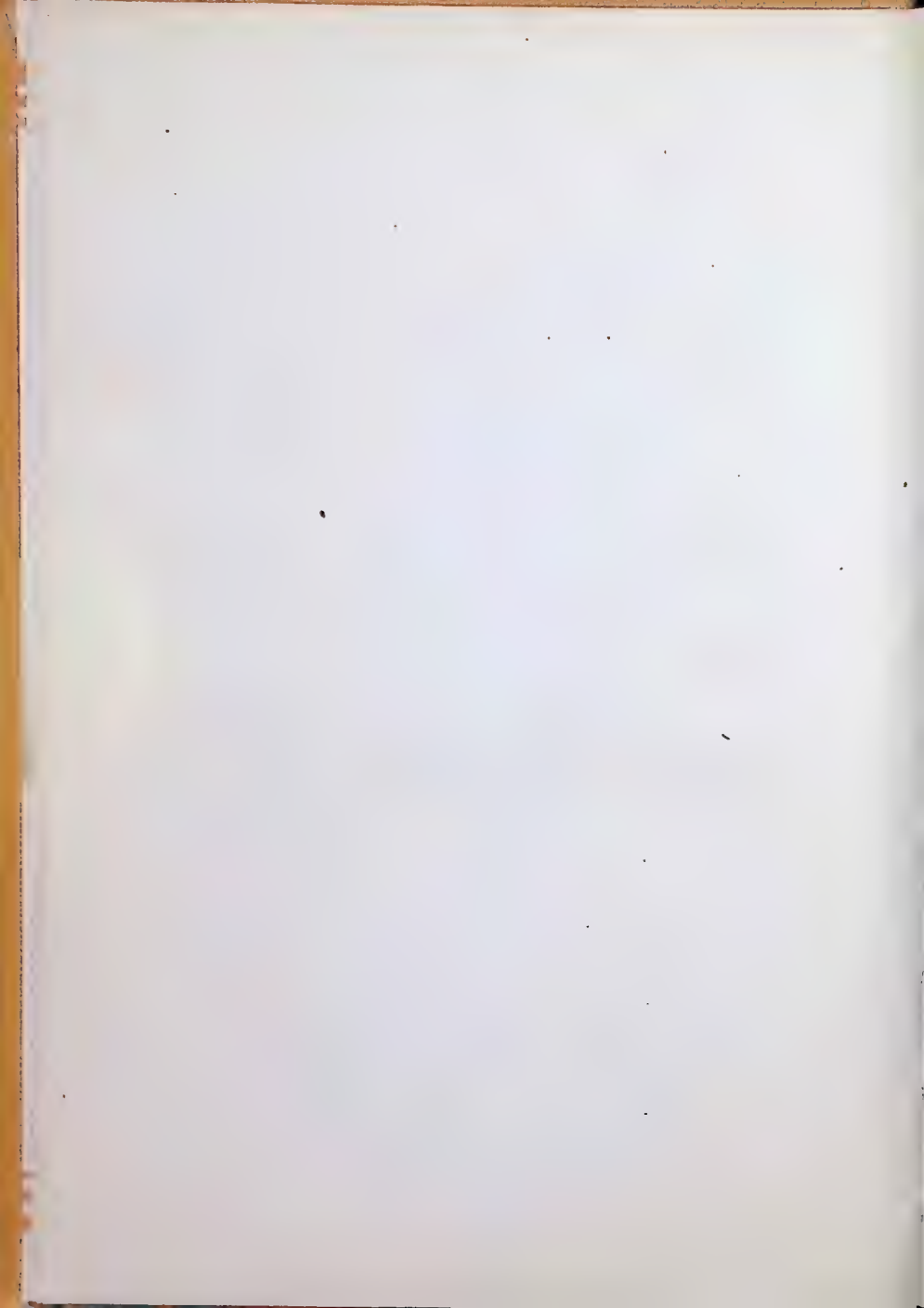
In preparing this new edition of *Moths and Butterflies*, our aim has been to increase both its appeal to children and its usefulness to teachers. Certain facts not mentioned in the first edition have been incorporated in the text. Perhaps the most notable change, however, is the addition of work-type exercises and comprehension tests at the end of each story.

The illustrations in color lend gayety, charm, and human interest to the text. They were drawn by Mabel Betsy Hill, an artist whose work appears in many children's readers. The photographs, showing moths and butterflies in their various stages, add immeasurably to the merit of the book. The majority were taken from life by L. W. Brownell, of Paterson, N.J. For those on pages 51, 55, and 59 we are indebted to T. A. Keleher, of Washington, D.C., while those on pages 47, 63, and 67 are used by courtesy of the United States Department of Agriculture.

THE PUBLISHERS

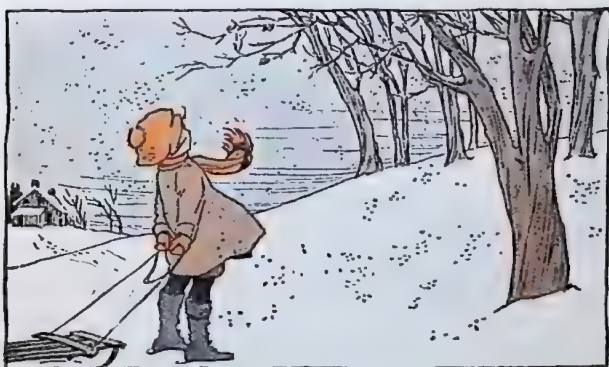
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THE CECROPIA MOTH

Don found something on a tree.
It was fastened to a twig.
The next day he asked
his teacher about it.



She said it was a cocoon.
A caterpillar was sleeping
in the cocoon.



The wind blew.
The snow fell.
The little caterpillar slept
all winter.



Soon spring came.
The caterpillar had changed
into a big moth.
The sun shone on the cocoon.
The moth felt the warm sun.
It stretched and stretched.



One spring day Don took
the cocoon to school.
He showed it to the children.
The cocoon was light brown,
and looked like paper.
Don put a twig near the cocoon.

The moth made a little hole
in one end of the cocoon.
It put its head out,
and saw the twig.
Then it crawled out.
It clung to the twig
with its front legs.



The moth had four wings.
When it came out of the cocoon,
its wings were weak.
Soon they grew strong.
They were brown and beautiful.
There were little black spots
on the wings.

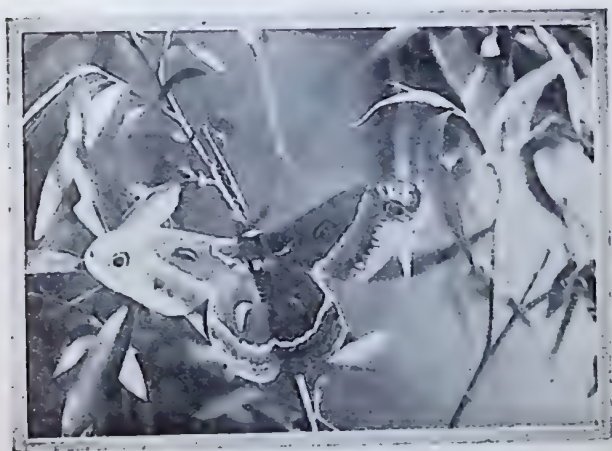
The wings had red and white
on them, too.

The moth was the color
of Robin Redbreast.

Don's teacher said that it is
often called Robin Moth.

Its real name is Cecropia.

It is a silk moth.



The Cecropia is six inches wide
when its wings are open.

It is one of our largest moths.

There are two little feelers
on the moth's head.

They are called antennae.

The moth smells
with its feelers.



The moth lays many eggs.

It lays them on the leaves
of trees.

The eggs are small and round.

They are cream-colored,
and have a red stripe.

Here is a green caterpillar.
It hatched from a Cecropia egg.
The egg was on a leaf.
The caterpillar crawls up a tree.
It eats many kinds of leaves.
It likes willow leaves.
It likes cherry leaves.
It likes maple leaves.



Caterpillars are very hungry.
They eat and eat.
Soon they grow big.



Now the summer is over.
The children are watching
 the Cecropia caterpillars.
The caterpillars are sleepy.
Soon they will spin
 silk cocoons.
They will go to sleep
 in their cocoon cradles.
They will sleep all winter.
In the spring they will be
 Cecropia Moths.



READ AND ANSWER

1. Where did Don find a cocoon?
2. When did the caterpillar wake up?
3. How can a moth smell?
4. What do Cecropia caterpillars eat?
5. What color is the Cecropia Moth?
6. What is its other name?

THE LUNA MOTH

The Luna Moth's wings look
like fairy wings.



They are light green, trimmed
with lavender.

Moths have four wings.

The Luna Moth's hind wings
have tails.

They are like the swallow's
tail.



Luna means moon.

The Luna Moth flies at night.

It likes the moonlight.

It likes the bright lights
in the houses.

It tries to fly
through the window.



Its wings beat
 against the glass.
The children see the moth,
 and run out to catch it.
It does not want to be caught.
You must not touch
 the wings of the Luna Moth.
Moths' wings are covered
 with little scales.

They will come off
if you touch the wings.
The moth will not be so pretty.



The Luna Moth likes
the butternut tree.
It likes the smell
of butternut leaves.
It lays its eggs
on the butternut leaves.



Here is a Luna caterpillar.
It came out of an egg.
It has been eating
butternut leaves.

How fat the caterpillar
is getting!

It is almost ready
to spin a silk cocoon.

Here is the cocoon, wrapped
in a butternut leaf.





Here is the cocoon, wrapped
in a butternut leaf.

It is made of silk.

The caterpillar will stay
in the cocoon all winter.



In the spring it will wake up,
and make a hole in one end
of the cocoon.

When it comes out, it will be
a Green Fairy.

WHICH SENTENCES ARE TRUE?

1. The Luna Moth is brown.
2. The Luna caterpillar likes
butternut leaves.
3. Moths have two wings.
4. Luna means moon.
5. The Luna Moth is called
the Green Fairy.
6. It flies in the moonlight.

THE POLYPHEMUS MOTH

Mary found a white cocoon.
It was wrapped in an oak leaf.
She found the cocoon
 on the ground.
The cocoon was lying
 under a white oak tree.
It fell there when the leaves
 dropped off.
It was not so large
 as the Cecropia cocoon.

Mary took the cocoon to school.

“I wish I could see the moth
come out,” she said.

Her teacher told her
what to do with the cocoon.





She told Mary to put it
in the bookcase.

She told the children
to watch it.

They looked at it every day,
but did not touch it.

They wanted to shake it.

Mary's teacher said that
cocoons must not be shaken.

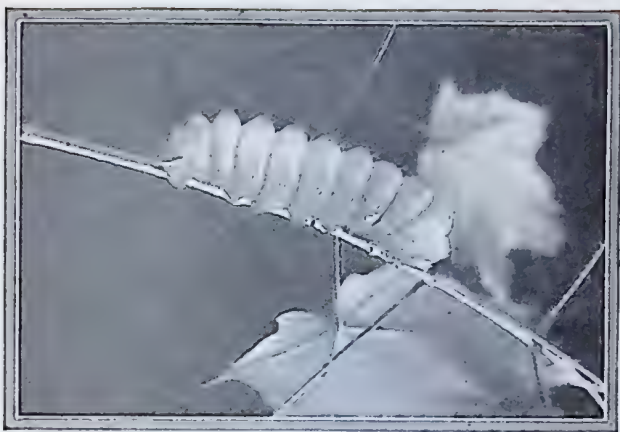


A caterpillar made the cocoon.

The caterpillar was green,
and had white stripes.

It lived in an oak tree.

It made its cocoon in the fall.



The cocoon is hard and white.
It is made of one strong silk
thread.

The thread is eight hundred
yards long.

The caterpillar spun the thread
and made its cocoon.

Then it went to sleep in it.

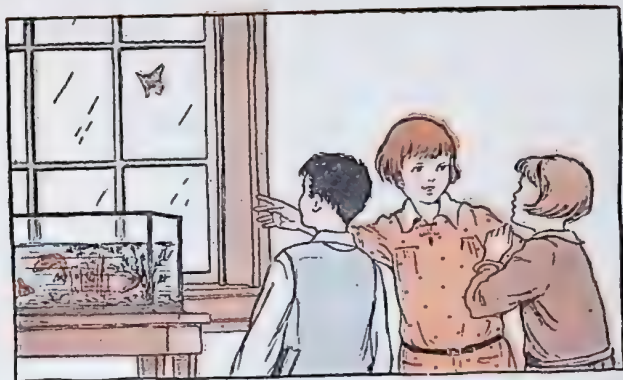
This is Mary's moth.

It came out of the cocoon
in the bookcase.

The children are glad that
they did not shake
the cocoon.

The moth is very beautiful.





It looks like the Cecropia Moth.

It is not so large or so dark
as the Cecropia.

Its wings are light brown.

Each wing has a large spot.

The moth has feelers.

It smells with its feelers.

Another name for feeler is
antenna.

Mary's teacher says that the
moth is a Polyphemus.

Polyphemus was a giant
with one eye.

The moth is named after him.

The spot on each hind wing
looks like a giant's eye.

DO ONE OF THESE THINGS

1. Draw a Polyphemus Moth.
2. Draw a Polyphemus caterpillar
on a leaf.
3. Draw a moth flying.
4. Draw a Polyphemus cocoon.

THE TOMATO SPHINX MOTH

Here is a pretty gray moth.
It has yellow spots on its back.
Its wings are big and strong.
It can fly very fast.



When the moth flies, its wings
 make a buzzing sound.
They sound like an airplane
 that is far away.



The moth flies at dusk.
It flies to the flowers.
Its feelers tell it
 where to find them.
Petunia flowers smell sweet.
They have deep cups.
The cups hold a sweet drink,
 called nectar.
The flowers make nectar.
Moths like to drink it.



The moth finds a petunia.
While it drinks the nectar,
 its wings hold it up.
It moves its wings very fast.
You can hardly see them.

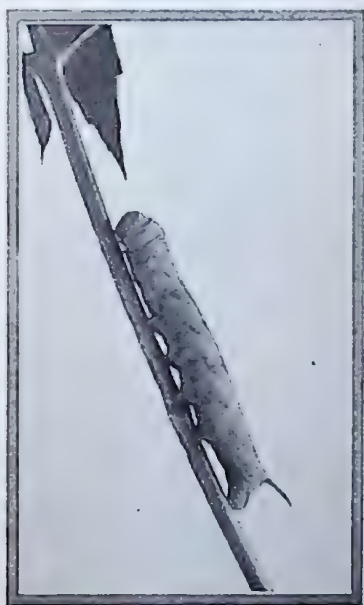


The moth has a sucking tube.
It is about four inches long.
The moth carries it rolled up
 under its head.
The tube is hollow.
The moth unrolls it.
It sticks the tube
 into a petunia flower.
It sucks up the sweet drink.

The moth lays its eggs
on tomato plants.

Caterpillars come from the eggs.

Sometimes we see them
on the tomato plants.



The tomato leaves taste good
to the caterpillar.

It eats and eats.

After a while it grows sleepy.

It crawls into the ground
and sheds its skin.

Now it is a pupa.

It sleeps in the ground
all winter.





Here is the pupa.

It looks like

a little brown jug.

In the summer it will wake up.

It will be a big moth then.

The name of this moth is
Tomato Sphinx Moth.
It is also called
Humming Bird Moth.
You may see it if you watch
for it at dusk.

SOMETHING TO DO

1. Tell what Tomato Sphinx Moths like to drink.
2. Tell what the Tomato Sphinx caterpillar eats.
3. Find the picture of the Tomato Sphinx Moth.
4. Draw a picture of the little brown jug.

THE CLOTHES MOTH

We see the Clothes Moth
in summer.

It likes dark corners.

It often gets into the house
through a door or a window.

It can crawl through a crack.

Then it flies
into a clothes closet.

A little girl's winter coat
is hanging there.

The coat has a fur collar
and fur cuffs.

The moth lays its eggs
in the fur.



Caterpillars will come
from the eggs.

They will eat the fur.

The coat will be spoiled.



After the moth lays its eggs,
it flies out of the closet.

The little girl's mother sees it.
She knows what has happened.
She hangs the coat in the sun.



The hot sun kills
the caterpillars.
It would be a good thing
if all Clothes Moth
caterpillars could be killed.
They eat clothing.
They eat furs and rugs.



The Clothes Moth caterpillars
build little cases to live in.
They make them of tiny bits
of cloth or fur.
As the caterpillars grow,
they make bigger cases.
They go to sleep in them.

The caterpillars change
into Clothes Moths.

The Clothes Moth is not
very large.

Its four wings are covered
with light brown scales.

It has six legs and two feelers.

All moths have two feelers,
four wings, and six legs.



The Clothes Moth
is hard to catch.
It flies very fast.

SOMETHING TO TELL

1. Where do Clothes Moths lay their eggs?
2. What do the caterpillars eat?
3. How can you kill the caterpillars?
4. How many legs has a moth?



THE APPLE MOTH

Here are some Apple Moths,
flying around an apple tree.
They are small, and their color
is brownish gray.



The mother moth lays eggs
on apple trees.



Soon caterpillars come
from the eggs.
The young caterpillars are
very hungry.

They hunt for apples.
Each caterpillar burrows
into an apple.



Some red apples were hanging
on an apple tree.
They looked good to eat.
One day the wind blew.

Some of the apples fell
to the ground.

Soon afterwards a boy came
through the orchard.

He saw the apples lying
on the ground.

He picked up one of them
and took a big bite.



“Oh, what an ugly worm!”
he cried.

The boy threw the apple
on the grass.



The caterpillar crawled
out of the apple.

Then it crawled to a tree
and hid under the bark.

It made a cocoon there.

It went to sleep in the cocoon.

The caterpillar stayed there
all winter.

It grew into a moth.

Then spring came.



The moth woke up.
It came out of the cocoon.
It flew around the apple trees.
It found many other moths
in the apple trees.

READ AND DO

1. Tell the story of the boy and the apple.
2. Play you are the boy.
Walk in the orchard.
Bite the apple.
Say what the boy said.

THE SILKWORM

Silkworms live in Japan.
They live in China, too.
People raise silkworms . . .
because they make silk.



Children in China and Japan
like to watch the silkworms.
They help to take care of them.



The silkworm is a caterpillar.
It is not hairy.

Its skin is smooth.

Little silkworms are brown.

Big ones are grayish white.

The silkworm likes to live
in a warm, dry place.

It does not like dirt or noise.

It must have fresh air.

It eats the leaves
of the white mulberry tree.



When it is little, it eats
the young leaves.

When it is big, it eats
the old leaves.

The silkworm eats
a great many leaves.

It eats all day.

Sometimes it eats all night.

It grows very fast.



After four weeks the silkworm
stops eating.

Now it is a large caterpillar,
two and a half inches long.

It finds some brush near by.



There it makes a silk cocoon.

The cocoon is light yellow.

The silkworm sleeps there
for four weeks.

Then it comes
out of the cocoon.

It is a furry white moth.

Its wings are small.

Its body is heavy.

It cannot fly.



The moth lives for ten days
or two weeks.

It lays at least
three hundred eggs.

People put the eggs
in a warm place.

Soon little silkworms come out.

These silkworms grow large
and make their cocoons.

Each cocoon is made
of one long silk thread.

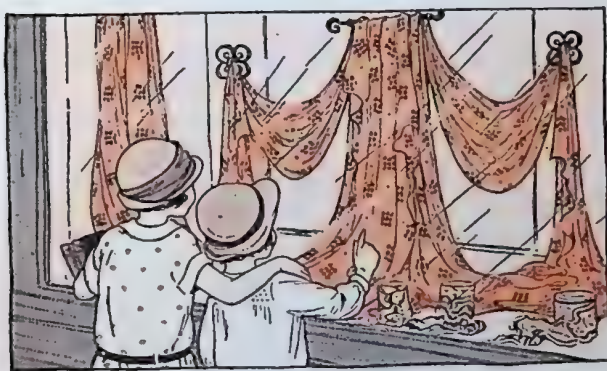
The cocoons are put
into a hot oven.

This kills the caterpillars.

Then the cocoons are put
into hot water.

This loosens the thread
so that it can be unwound.

The threads of several cocoons
are twisted together.



They are made into silk cloth
and ribbon.

The silkworm helps to make
our pretty clothes.

ANSWER THESE QUESTIONS

1. Where do the silkworms live?
2. What do they eat?
3. What color are they?
4. What color are the cocoons?
5. What color are the moths?
6. What is silk cloth made of?

THE GYPSY MOTH



Here is a Gypsy Moth.

It is dark brown.

It is not so big

as the Cecropia Moth.

It is not so small

as the Clothes Moth.

It is a middle-sized moth.
It flies around the trees.
The Gypsy Moth lives
 in New England.
It lives in some other places,
 too.



The Gypsy Moth is bad
 for the trees.
People try to get rid of it.
They spray the trees on which
 it is found.
We hope that some day
 there will be no more
Gypsy Moths.



The mother moth is white.

It has black marks

on its wings.

It lays big yellow patches

of eggs.

It lays its eggs on oak trees

and on willow trees.

It lays eggs on other trees,

too.



The eggs are laid in July.

They do not hatch

until the next spring.

Then tiny caterpillars come

from the eggs.



They grow into long, hairy
caterpillars.

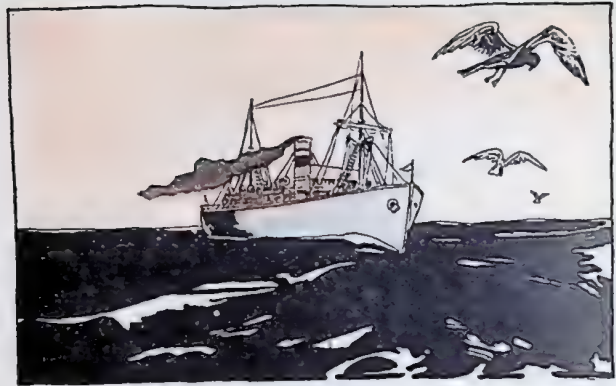
Most birds will not eat
hairy caterpillars.

The caterpillars eat the leaves
of the trees.

Sometimes the trees die.

The Gypsy Moth came
from Europe.

It came in a big ship.



CROSS OUT THE WRONG WORDS

1. The Gypsy Moth is ^{harmful.}
not harmful.
2. The Gypsy Moth is ^{small.}
middle-sized.
3. The eggs are laid in ^{May.}
July.
4. The Gypsy Moth came from ^{Europe.}
Japan.

THE MONARCH BUTTERFLY

Here is a large butterfly.

Its wings are golden brown.

It is on a milkweed plant.

It is a Monarch Butterfly.



We see the Monarch Butterfly
in warm weather.

It likes to fly in the sun.

It looks for something to eat
in the flowers.



Flowers make sweet nectar.

They keep it in their cups.

Butterflies like nectar.

The butterfly smells
the sweet nectar.

It smells with its antennae.

It flies to the flowers
and drinks the nectar.

It drinks with a little tube.



The tube is hollow.
It is rolled in a ball
 under the butterfly's head.
The butterfly unrolls the tube
 to drink the nectar.
It drinks the nectar as you
 drink milk through a straw.

Now cold weather is coming.

The flowers are gone.

The trees are bare.

Winter is almost here.

What will the Monarch

Butterflies do?

Birds fly to the South.

The butterflies go south, too.

They fly south together.



Flowers grow in the South.

It is warm there.

It is sunny.

The butterflies will stay there
all winter.



The Monarch Butterflies go
north in the spring.
They find the milkweed plants.
They lay their eggs there.
Soon caterpillars come
from the eggs.
They eat the milkweed leaves.
Soon their skins are too small.
They shed their skins.
They do this several times.
All caterpillars shed
their skins.
At last the Monarch caterpillars
grow sleepy.
Each caterpillar finds a leaf.

There it spins a silk button.
It sheds its last caterpillar
skin.

Now it is a pupa.
It hangs from the silk button.
It is green and has
gold spots.





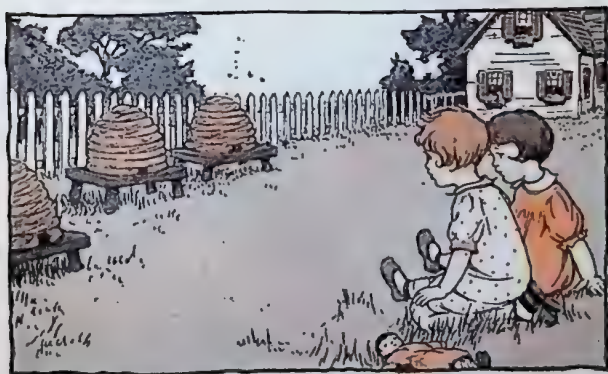
The pupa sleeps ten days.
Then it becomes a butterfly.

PUT IN THE RIGHT WORD

1. The Monarch Butterfly
is ——— brown.
2. Monarch Butterflies lay
their eggs on ——— leaves.
3. In winter they go ———.

THE TIGER SWALLOWTAIL

It is a hot summer day.
The bees are humming.
There is a yellow butterfly!
It has tails on its wings.



They are like the tail
of a swallow.

There are black stripes
on its wings.

They look like the tiger's
stripes.

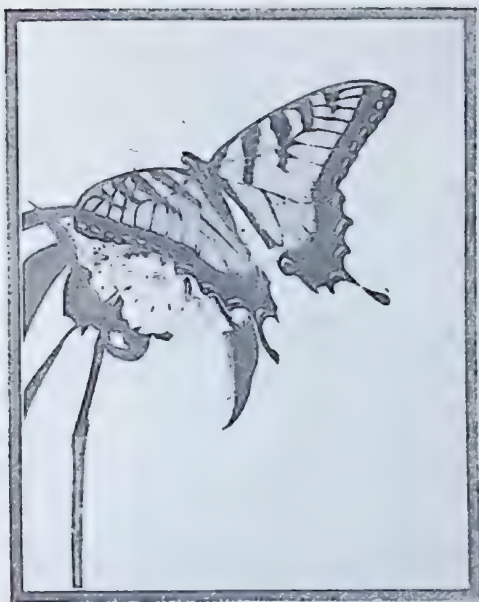
The name of the butterfly
is Tiger Swallowtail.



The butterfly has four wings.
It has two feelers.

The feelers are
on the butterfly's head.

The feelers are often called
antennae.



The butterfly can smell
with its antennae.

The Tiger Swallowtail flies
around the flowers.

The flowers make sweet nectar.
The butterfly likes nectar.

The Tiger Swallowtail has
a sucking tube.

All butterflies have them.

The sucking tube is
the butterfly's mouth.

Butterflies drink nectar
with their tubes.

They use their tubes as you
use a straw.



The Tiger Swallowtail lays
its eggs on birch leaves.

Caterpillars come from the eggs.

They eat many leaves.

They grow bigger and bigger.



At last the caterpillar
feels sleepy.

It spins a silk button
on a stem.

It fastens itself to the button.

It spins a few silk threads
around itself and the stem.

The threads hold it in place.

They are like a hammock.

Now the caterpillar
has become a pupa.



The pupa sleeps and sleeps.

When it wakes, it is
a Tiger Swallowtail.



SOMETHING TO DO.

1. Draw a picture of a caterpillar.
2. Draw a picture of the Tiger Swallowtail.
3. Write a story telling how the Tiger Swallowtail drinks nectar.

THE CABBAGE BUTTERFLY

One summer day Jane went
into the garden.

She saw a white butterfly.

The butterfly was resting
on a cabbage leaf.

Jane caught the butterfly
in her hand.

It was very pretty.

It was not very large.

It was a Cabbage Butterfly.

The butterfly's wings were less
than two inches across.

There were little black spots
on its wings.

The butterfly had six feet.

All butterflies have six feet.

It walked on Jane's hand.

The butterfly had two feelers
on its head.



The Cabbage Butterfly lives
in the garden.

There are cabbages growing
in the garden.

The butterfly finds them.

It lights on a cabbage leaf.

Then it lays its eggs
on the cabbage leaf.



After a while caterpillars come
from the eggs.

The caterpillars are small
and green.

We call the caterpillars
cabbage worms.

The cabbage worms eat
the cabbages.
They make holes
in the cabbage leaves.
The cabbage worms spoil
the cabbages.



People throw water
on the cabbage worms.
There is soap in the water.
The soapy water kills
the cabbage worms.
If all of them were killed,
there would be no more
Cabbage Butterflies.



The cabbage worms eat and eat.
They grow large.
Then they turn into pupae.
They sleep all winter.
In spring, the cabbage worms
wake up.



They are not cabbage worms
any more.

They are Cabbage Butterflies.

SOMETHING TO PLAY

1. Pretend that you are Jane and catch the butterfly.
2. Pretend that you are pouring water on the cabbages.
3. Pretend that you are a cabbage worm and go to sleep for the winter.

THE MOURNING CLOAK BUTTERFLY

Last spring three children went
to the woods.

There was snow on the ground.

They did not see many birds.

The birds had not come back
from the South.

They did not see any flowers.

The flowers were still asleep
under the snow.



The children saw a butterfly.

The butterfly was pretty.

Its wings were dark.

The edges of the wings
were blue and yellow.

The children did not know
the name of the butterfly.



They went home and looked
in a book.

There they found a picture
of the butterfly.

They found the name
of the butterfly, too.

It was the Mourning Cloak
Butterfly.



The Mourning Cloak lives
near the woods.

It likes to drink sap
from the trees.

The sap is sweet.

It tastes like nectar.



Here is a Mourning Cloak
on a twig.

The bark is broken.

The sap is running out.

The butterfly drinks the sap.

It drinks the sap
with its sucking tube.

The Mourning Cloak stays
in the North all winter.
It does not go to the South
as the Monarch does.
It finds a place to sleep.
Sometimes it crawls
under the bark of a tree.
Sometimes it sleeps
under a fallen leaf.
Sometimes it sleeps in a barn.
It does not need any food
in winter.
It sleeps until spring.
When it feels the warm sun,
it wakes up.

It lays its eggs on elm leaves.
Caterpillars come from the eggs.
They are not pretty.
They are black.
They are covered with spines.
The spines are a help
to the caterpillars.
Birds will not eat
caterpillars that have spines.



The caterpillars go to sleep.

Then they are pupae.

When they wake, they are

Mourning Cloak Butterflies.

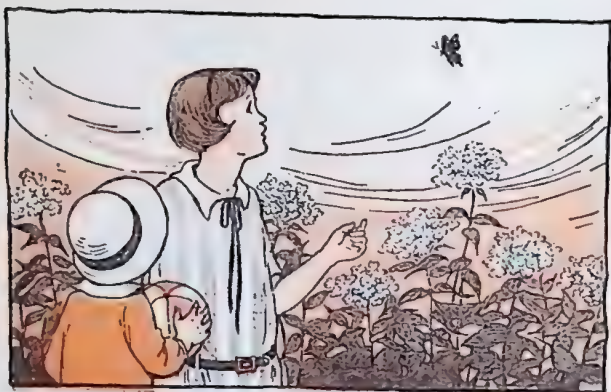
SOMETHING TO DO

1. Find the sentences that tell where the Mourning Cloak Butterfly sleeps.
2. Find the sentence that tells where it lays its eggs.
3. Find the sentence that tells the color of the caterpillars.
4. Find a sentence that tells why birds do not like to eat caterpillars.

THE BLACK SWALLOWTAIL

Here is a big black butterfly.
It has two rows of spots
on its wings.





It has tails on its wings.
It is a Black Swallowtail.
The Black Swallowtail
 can fly fast.
It flies to the flowers.
It likes phlox and zinnias.
Their nectar cups are not deep.
It is easy for the butterfly
 to reach their nectar.

The Black Swallowtail lays
its eggs on wild carrot.
The eggs are small.
Caterpillars come from the eggs.
The caterpillars have green,
black, and yellow stripes.



Black Swallowtail caterpillars
have orange horns.
They stick them out in front
when they are frightened.
The horns give out a bad smell.
The smell is a help
to the caterpillars.
Birds do not like the smell.
They do not eat Black
Swallowtail caterpillars.



The caterpillar eats
many wild carrot leaves.
It grows big.
It gets several new skins.

At last it grows sleepy.
It climbs up a stem
of a wild carrot.
There it makes a silk button.
It fastens itself
to the button.



It makes a hammock like that
of the Tiger Swallowtail.
It is now a pupa.



The pupa goes to sleep.
At last it wakes up.
Then it is a Black Swallowtail
Butterfly.



At first it cannot fly.
Its wings are damp and weak.
It sits still for several hours
while its wings dry.
Then its wings are strong.
Soon it flies away.



Mabel Betsy Hill

WRITE YES OR NO AFTER EACH
SENTENCE

1. The Black Swallowtail flies fast.
2. It likes phlox.
3. It likes zinnias.
4. Its eggs are large.
5. It lays them on wild carrot.
6. The caterpillars have red horns.

THE SULPHUR BUTTERFLY

This is a Sulphur Butterfly.
It looks something
like a Cabbage Butterfly.



It is the same size.

The Cabbage Butterfly is white,
but this butterfly is yellow.

It is the color of sulphur.

That is why it is called
Sulphur Butterfly.



Its wings have a black edge.

It has a pinkish brown patch
on its hind wings.

There is a silver spot
in each patch.

The Sulphur Butterfly flies
around the clover.

It likes red clover.



Kubel Betty Hill

It likes white clover, too.

The clover flowers make
sweet nectar.

The Sulphur Butterfly likes
nectar.

It flies into the garden.

There are many flowers
in the garden.



Sometimes it rains there.

Butterflies do not like the rain.

They cannot fly well
when it rains.

The Sulphur Butterfly crawls
under a leaf.

The leaf is an umbrella
for the butterfly.

It will stay under the leaf
until the rain is over.

Then it will fly about again.



The flowers close their nectar cups
when it rains.

The rain cannot get
inside the cups.

Sometimes the butterflies want
a drink before the flowers
open again.

Then they take a drink
of water.

Sulphur Butterflies do not like
to be alone.

Sometimes we see large flocks
of them.

If we go too close to them,
they are frightened.

They all fly away.



The Sulphur Butterfly lays
its eggs on clover leaves.
Caterpillars come from the eggs.
The caterpillars are hungry.
They eat many clover leaves.
After a while they turn
into Sulphur Butterflies.



SOMETHING TO DO

1. Tell how the Sulphur Butterfly looks.
2. Tell where it lives.
3. Tell what it eats.
4. Tell where it lays its eggs.

THE RED ADMIRAL

The Red Admiral is
a beautiful butterfly.
We do not see it very often.
It looks like velvet.
Its wings are very dark.
They are almost black.
They have red trimmings.
There are red bands
on the front wings.
The hind wings have red edges.



There are white spots
on the front wings.

They look almost like spots
of paint.

Mother Nature painted them.
She paints all the butterflies.
She uses many colors.

The Red Admiral is larger
than the Cabbage Butterfly.
It is not so large
as the Monarch.

When its wings are open,
they are two inches across.



You may see the Red Admiral
in September.

Look for it on your way
to school.

It likes fall flowers.
It may be on an aster.
It may be on a zinnia.
It likes candytuft, too.



The Red Admiral's antennae
are dark.

The Red Admiral smells
with its antennae.

All butterflies smell
with their antennae.



The Red Admiral lays its eggs
on nettle plants.

Caterpillars come from the eggs.

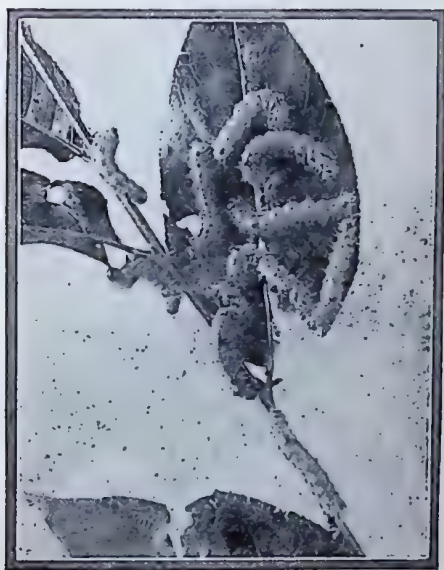
They have spines.

They eat and eat.

They grow too big
for their skins.

Their skins will not stretch

The caterpillars crack
their skins, and crawl out.
Then the caterpillars eat
more leaves.
They get new skins again.
They get new skins several times.



The caterpillar grows sleepy.
It turns into a pupa.
The pupa sleeps and sleeps.
It sleeps like a baby
in a cradle.

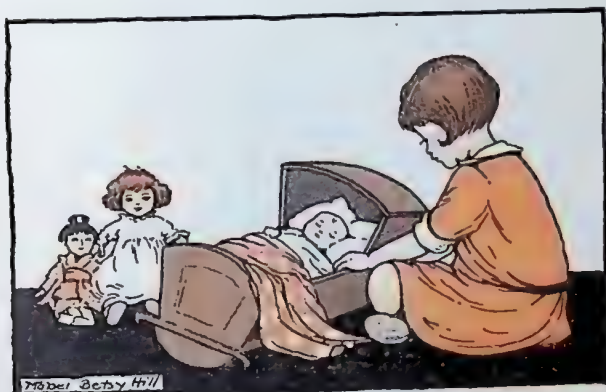


After a while, the pupa
wakes up.
After it wakes up,
it is no longer a pupa.
It is a butterfly.
At first it cannot fly.
Its wings are small and weak.
It clings to a twig.
It waves its wings.

They grow large and strong.
Then the butterfly flies away.

FILL THE BLANKS

1. The Red Admiral has —— bands on its front wings.
2. It lays its eggs on —— plants.
3. —— come from the eggs.



THE GREAT SPANGLED FRITILLARY

This butterfly has a long name.

It is Great Spangled Fritillary.

There are dark spots

on its wings.

They look like jet beads.

Sometimes jet beads

are called spangles.

That is why the butterfly

is called Spangled.

The butterfly is light brown.

It has white spots

on its hind wings.

They are on the under side.

They look like silver.

Fritillary means silver spot.



The Great Spangled Fritillary
flies in the garden.
It drinks nectar from the
flowers.



The butterflies help
Mother Nature.
They help her as you help
your mother.
They carry pollen for her.
Flowers make pollen.
The butterflies carry it
from flower to flower.
Then the flowers can make
good seed.



The Great Spangled Fritillary
lays many eggs.

It lays them on violet plants.

Black caterpillars come out
of the eggs.

They have spines.

They eat violet leaves.



The caterpillars never eat
during the day.

They eat only at night.

During the day, they hide
under the leaves.

The caterpillars grow large.

They get new skins.

Then they go to sleep.
When they go to sleep,
 they change into pupae.
They sleep for some time.
When they wake up,
 they are butterflies.

CROSS OUT THE WRONG WORDS

1. The Great Spangled Fritillary
 is brown.
 is black.
2. It drinks rain water.
 nectar.
3. It lays eggs on nettle plants.
 violet

RIDDLES

1. I live in Japan and China.
I like the white mulberry tree.
I help to make pretty clothes.
Who am I?
2. I fly at night.
I live in your clothes closet.
Who am I?
3. It is brown.
It hangs on a tree.
A caterpillar sleeps in it.
What is it?



